

Name(s) of Risk Team Members: Joel Scott, Mel Van Essendelft, Raymond Karol, Dave Passarello, Arthur Piper, Peter Cirmigliaro, Ed Lessard, John Maraviglia			Point Value → Parameter ↓		1		2		3		4		5		
Area/Facility Description Title: Site Wide Material Handling			Occupancy or Use		≤once/year		≤once/month		≤once/week		≤once/shift		>once/shift		
Area/Facility # (if applicable): Facility-Wide FRA 7															
Area/Facility Description: Collider Accelerator Department			Severity		First Aid Only		Medical Treatment		Lost Time		Partial Disability		Death or Permanent Disability		
Approved by: <i>E. Lessard</i> Date: 7/8/04   Rev.#: 1			Likelihood		Impossible		Unlikely		Possible		Probable		Multiple		
Reason for Revision (if applicable):  FRA number added. Uniform hazard nomenclature added.									Comments:						
				Before Additional Controls							After Additional Controls				
Physical Item or Activity	Hazard(s)	Control(s)	Occupancy A	Severity B	Likelihood C	Risk* AxBxC	Control(s) Added to Reduce Risk				Occupancy A	Severity B	Likelihood C	Risk* AxBxC	% Risk Reduction
Moving Items with Cranes	Being struck by an object, such as a tool falling on a worker from above	Training, daily crane inspections prior to use, PE crane maintenance, PPE, certified rigging equipment, Tier 1, yearly rigging inspections, load weights and center of gravity known prior to lift, procedures, qualified riggers if required, critical lift and engineered lift requirements and reviews, warning alarms, postings, work planning, load testing, barriers	4	5	2	40									
Mobile crane use	Being struck by an object, such as a tool falling on a worker from above	Training, daily crane inspections prior to use, PE crane maintenance, PPE, certified rigging equipment, Tier 1, yearly rigging inspections, load weights and center of gravity known prior to lift, procedures, critical lift and engineered lift requirements and reviews, warning alarms, postings, work planning, load testing, barriers, certified HEMO operators and riggers only, seat belts, PE Rigging Supervisor review	4	5	2	40									
Mobile crane use	Highway accidents, such as tip-over or traffic accident	Training, daily crane inspections prior to use, PE crane maintenance, PPE, certified rigging equipment, Tier 1, yearly rigging inspections, load weights and center of gravity known prior to lift, procedures, critical lift and engineered lift requirements and reviews, warning alarms, postings, work planning, load testing, barriers, certified HEMO operators and riggers only, seat belts, PE Rigging Supervisor review, outriggers on crane, alarms and indications in cab. escort for movement, seat belts	4	4	2	32									
Fork truck use	Being struck by an object, such as a falling load	Training, daily fork truck inspections, PPE, seat belts, Tier 1 inspections, PE inspections and maintenance, required items strapped to mast, load weight and center of gravity known, work planning, postings, alarms, certified riggers available, escort for transport if required, road surface maintenance	4	4	3	48									
Fork truck use	Highway accidents, such as tip-over or traffic accident	Training, daily fork truck inspections, PPE, seat belts, Tier 1 inspections, PE inspections and maintenance, required items strapped to mast, load weight and center of gravity known, work planning, postings, alarms, certified riggers available, escort for transport if required, road surface maintenance, spotter, backing-up alarms	4	4	3	48									

Miscellaneous rigging equipment use (come-alongs, lifting fixtures, a-frames, Johnson bars, skates, etc.)	Being struck by an object, such as a falling load or tool	Certified inspected equipment, training, work planning, engineering review and witnessed load tests, PPE as required, certified riggers as required, load weights and center of gravity known, postings labeling	4	4	3	48						
Miscellaneous rigging equipment use (come-alongs, lifting fixtures, a-frames, Johnson bars, skates, etc.)	Overexertion – injuries caused by excessive lifting, pushing, pulling, holding, carrying or throwing of an object	Certified inspected equipment, training, work planning, engineering review and witnessed load tests, PPE as required, certified riggers as required, load weights and center of gravity known, postings labeling	4	4	3	48						
Manual material handling (pallet jacks, barrel and equipment carts, etc.)	Being struck by an object, such as a falling load or tool	Training, certified equipment, PPE as required, limited to load carrying limit of equipment, postings, tier 1,procedures, specific back injury prevention training, work planning , certified riggers if required, manual lift weight limit	5	3	3	45						
Manual material handling (manual lift or pallet jacks, barrel and equipment carts, etc.)	Overexertion – injuries caused by excessive lifting, pushing, pulling, holding, carrying or throwing of an object	Training, certified equipment, PPE as required, limited to manual lift weight limit or load carrying limit of equipment, postings, Tier 1 inspections, procedures, specific back-injury prevention training, work planning, certified riggers if required	5	3	4	60	The OHSAS 18001 management system is expected to raise awareness with regards to sprains and strains during manual-lift or manual-pull work. Strains and sprains and first aid events are discussed at the quarterly WOSH Committee meetings. Each C-AD meeting now starts with “5-minutes” on safety and strain and sprain events are discussed.	5	3	3	45	25%
Transportation of small equipment in lab vehicles	Being struck by an object, such as a falling load or tool	Training, lab vehicles rated for load, procedures, loads secured in trucks, certified riggers if required, work planning, chemicals and radioactive materials in proper containers and labeled, vehicle maintenance, speed limits, traffic rules, snow removal, vehicle inspections	4	3	3	36						
Transportation of small equipment in lab vehicles	Highway accidents, such as traffic accident	Training, lab vehicles rated for load, procedures, loads secured in trucks, certified riggers if required, work planning, chemicals and radioactive materials in proper containers and labeled, vehicle maintenance, speed limits, traffic rules, snow removal, vehicle inspections	4	4	3	48						
Transportation of large items on trucks, lab and outside vehicles	Being struck by an object, such as a falling load or tool	Training, certified riggers to load vehicle, tie downs inspected prior to use, chocking and blocking by PE carpenters, SBMS subject areas for chemical and radioactive transports, DOT transport rules, work planning, supervisor oversight, escorts as required, postings and labeling as required, PPE as required, vehicle maintenance, traffic rules, snow removal, road barriers, vehicle inspections	4	3	3	36						
Transportation of large items on trucks, lab and outside vehicles	Highway accidents, such as traffic accident	Training, lab vehicles rated for load, procedures, loads secured in trucks, certified riggers if required, work planning, chemicals and radioactive materials in proper containers and labeled, vehicle maintenance, speed limits, traffic rules, snow removal, vehicle inspections, spill response and emergency aid response onsite.	4	4	3	48						
Further Description of Controls Added to Reduce Risk:												
*Risk:	0 to 20	21 to 40	41-60				61 to 80		81 or greater			
	Negligible	Acceptable	Moderate				Substantial		Intolerable			